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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/737,564	12/18/2000	Kyoko Higashino	Q61786	9907

7590

12/12/2001

SUGHRUE, MION, ZINN, MACPEAK & SEAS
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EXAMINER

CUEVAS, PEDRO J

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 12/12/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/737,564

Applicant(s)

HIGASHINO ET AL.

Examiner

Pedro J. Cuevas

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 December 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 161. Correction is required.

Specification

2. The spacing of the lines of the specification is such as to make reading and entry of amendments difficult. New application papers with lines double spaced on good quality paper are required.
3. The claims are objected to because the lines are crowded too closely together, making reading and entry of amendments difficult. Substitute claims with lines one and one-half or double spaced on good quality paper are required. See 37 CFR 1.52(b).
4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Neural-Point Lead Terminal Stator Winding And Stator For An Alternator.

Claim Objections

5. The claims are objected to because the lines are crowded too closely together, making reading and entry of amendments difficult. Substitute claims with lines one and one-half or double spaced on good quality paper are required. See 37 CFR 1.52(b).

Claim Rejections - 35 USC § 102

Art Unit: 2834

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-3 and 6-7 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S.

Patent No. 6,204,586 B1 to Umeda et al.

Umeda et al. clearly teaches the construction of a stator (2) for an alternator, the stator comprising:

a cylindrical stator core (32) formed circumferentially with a number of slots (35) extending axially; and

a stator winding (Figure 7) composed of a three-phase stator winding portion constructed by connecting three winding phase portions into a three-phase star connection (Column 5, lines 34-35), each of the winding phase portions being installed in the stator core by sequentially inserting strands of wire into the slots at predetermined intervals and a neutral point of the stator winding being electrically connected to a rectifier (5) for rectifying alternating-current output, wherein

each of the strands of wire constituting the three winding phase portions is led out from a coil end group of the stator winding to an outer side to constitute a neutral-point terminal (33k),

each of the neutral-point terminals (33k) has a flat side surface portion,

a neutral-point joint portion of the stator winding is constructed by abutting and electrically joining the flat side surface portions of the neutral-point terminals (33k);

the strands of wire are conducting wires having a rectangular cross section;

the neutral-point terminals (33k) of the strands of wire constituting the three winding phase portions comprise:

a first neutral-point terminal (Y1) positioned centrally in a circumferential direction, the first neutral-point terminal (Y1) being led axially outwards from the coil end group to constitute a neutral-point lead portion connected to the rectifier; and

second and third neutral-point terminals (X2, Z2) positioned on first and second sides in the circumferential direction, each being led axially outwards from the coil end group, then bent, and led around to the first neutral-point terminal (Y1),

wherein the side surface portions at tips of the second and third neutral-point terminals (X2, Z2) are abutted and electrically joined from the first and second sides in the circumferential direction to the side surface portions of a portion of the first neutral-point terminal (Y2) led out from the coil end group;

at least a part of the neutral-point terminals (33k) extending from the coil end group to the outer side is secured to the coil end group by means of an electrically-insulating resin portion (adhesive of insulation tube 333); and

the electrical joining is welding (Column 4, lines 20-21).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,204,586 B1 to Umeda et al. in view of common knowledge in the art.

Umeda et al. discloses the claimed invention except for a stator for an alternator comprising:

a connecting member composed of a conductor having flat side surface portions, said flat side surface portions of said neutral-point terminals (33k) and said connecting member being abutted and electrically joined to each other; and

said connecting member constitutes a neutral-point lead portion connected to said rectifier (5).

It would have been an obvious matter of design choice to include a connecting member to the neutral-point terminals (33k), since the applicant has not disclosed that the connecting member solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with any conductor having flat side surface portions electrically joined to the neutral-point terminals (33k).

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pedro J. Cuevas whose telephone number is (703) 308-4904. The examiner can normally be reached on M-F from 8:30 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Néstor R. Ramírez can be reached on (703) 308-1371. The fax phone numbers for

Application/Control Number: 09/737,564


Page 6

Art Unit: 2834

the organization where this application or proceeding is assigned are (703) 305-1341 for regular communications and (703) 305-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Pedro J. Cuevas
November 29, 2001


ELVIN ENAD
PRIMARY EXAMINER

11/20/01
12/07/01